## INTERNATIONAL SEARCH REPORT

Internation pplication No PCT/IT 03/00455

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A. CLASSII IPC 7	FICATION OF SUBJECT MATTER H04B10/18							
According to	International Patent Classification (IPC) or to both national classifica	tion and IPC						
B. FIELDS SEARCHED								
Minimum do IPC 7	cumentation searched (classification system followed by classification H04B	on symbols)						
Documentat	ion searched other than minimum documentation to the extent that se	uch documents are incl	uded in the fields so	earched				
Electronic da	ata base consulted during the international search (name of data bas	se and, where practical	, search terms used	)				
INSPEC	, EPO-Internal							
Category *	ENTS CONSIDERED TO BE RELEVANT  Citation of document, with indication, where appropriate, of the rele	evant nassanes		Relevant to claim No.				
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Y	EP 1 263 155 A (ASTON PHOTONIC			1-22				
	TECHNOLOGIES LT) 4 December 2002 (2002-12-04)							
	cited in the application							
	paragraph '0003! – paragraph '00 paragraph '0013! – paragraph '00			·				
	paragraph 0013: — paragraph 00 paragraph 00	127:		•				
•	paragraph '0093! - paragraph '01 paragraph '0117! - paragraph '01	.03!						
İ	paragraph 0117: - paragraph 01 paragraph 0143! - paragraph 01							
	figures 1,3,6,10,11,14,16							
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X Furth	ner documents are listed in the continuation of box C.	X Patent family	members are listed	in annex.				
		"T" later document pub		ernational filing date the application but				
"A" document defining the general state of the art which is not considered to be of particular relevance		cited to understan	d the principle or th	eory underlying the				
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which	nt which may throw doubts on priority claim(s) or is cited to establish the publication date of another n or other special reason (as specified)	"Y" document of partic	ular relevance; the					
	ent referring to an oral disclosure, use, exhibition or	document is comb	bined with one or m	ventive step when the ore other such docu- us to a person skilled				
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Date of the actual completion of the international search		Date of malling of	the international se	arch report				
10 March 2004		25/03/2	2004					
Name and mailing address of the ISA		Authorized officer						
European Patent Office, P.B. 5818 Patentiaan 2 NL – 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo ni,			_					
	Fax: (+31-70) 340-3016	Vaquero	), R	·				

## **INTERNATIONAL SEARCH REPORT**

Internation Application No
PCT/IT 03/00455

nonlinearities and dispersion-management in highly dispersed transmission" IEICE TRANSACTIONS ON COMMUNICATIONS, APRIL 2003, INST. ELECTRON. INF. & COMMUN. ENG, JAPAN, vol. E86-B, no. 4, pages 1205-1211, XP002273096 ISSN: 0916-8516 the whole document  Y ZOU X Y ET AL: "LIMITATIONS IN 10 GB/S A VARIETY OF FIBER TRANSMISSION WHEN USING A VARIETY OF FIBER TYPES TO MANAGE DISPERSION AND NONLINEARITIES" JOURNAL OF LIGHTWAVE TECHNOLOGY, IEEE. NEW YORK, US, vol. 14, no. 6, 1 June 1996 (1996-06-01), pages 1144-1152, XP000598520 ISSN: 0733-8724 the whole document  A US 6 480 658 B1 (GAUTHERON OLIVIER ET AL) 1-22 12 November 2002 (2002-11-12) column 1, line 52 -column 2, line 27 column 3, line 19 -column 4, line 10 column 5, line 32 -column 7, line 42 figure 1			PC1/11	03/00455
SANG-GYU PARK ET AL: "Intra-channel nonlinearities and dispersion-management in highly dispersed transmission" IEICE TRANSACTIONS ON COMMUNICATIONS, APRIL 2003, INST. ELECTRON. INF. & COMMUN. ENG. JAPAN, vol. E86-B, no. 4, pages 1205-1211, XP002273096 ISSN: 0916-8516 the whole document  ZOU X Y ET AL: "LIMITATIONS IN 10 GB/S WDM OPTICAL-FIBER TRANSMISSION WHEN USING A VARIETY OF FIBER TYPES TO MANAGE DISPERSION AND NONLINEARITIES" JOURNAL OF LIGHTWAVE TECHNOLOGY, IEEE. NEW YORK, US, vol. 14, no. 6, 1 June 1996 (1996-06-01), pages 1144-1152, XP000598520 ISSN: 0733-8724 the whole document  A US 6 480 658 B1 (GAUTHERON OLIVIER ET AL) 12 November 2002 (2002-11-12) column 1, line 52 -column 2, line 27 column 3, line 19 -column 4, line 10 column 5, line 32 -column 7, line 42 figure 1	Continua.	ation) DOCUMENTS CONSIDERED TO BE RELEVANT		
nonlinearities and dispersion-management in highly dispersed transmission" IEICE TRANSACTIONS ON COMMUNICATIONS, APRIL 2003, INST. ELECTRON. INF. & COMMUN. ENG, JAPAN, vol. E86-8, no. 4, pages 1205-1211, XP002273096 ISSN: 0916-8516 the whole document  ZOU X Y ET AL: "LIMITATIONS IN 10 GB/S WDM OPTICAL-FIBER TRANSMISSION WHEN USING A VARIETY OF FIBER TYPES TO MANAGE DISPERSION AND NONLINEARITIES" JOURNAL OF LIGHTWAVE TECHNOLOGY, IEEE. NEW YORK, US, vol. 14, no. 6, 1 June 1996 (1996-06-01), pages 1144-1152, XP000598520 ISSN: 0733-8724 the whole document  US 6 480 658 B1 (GAUTHERON OLIVIER ET AL) 12 November 2002 (2002-11-12) column 1, line 52 -column 2, line 27 column 3, line 19 -column 4, line 10 column 5, line 32 -column 7, line 42 figure 1  KUMAR S ET AL: "Intrachannel nonlinear penalties in dispersion-managed transmission systems" IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS, MAY-JUNE 2002, IEEE, USA, vol. 8, no. 3, pages 626-631, XP002273097 ISSN: 1077-260X cited in the application	ategory °	Citation of document, with indication, where appropriate, of the relevant passages	-	Relevant to claim No.
WDM OPTICAL-FIBER TRANSMISSION WHEN USING A VARIETY OF FIBER TYPES TO MANAGE DISPERSION AND NONLINEARITIES" JOURNAL OF LIGHTWAVE TECHNOLOGY, IEEE. NEW YORK, US, vol. 14, no. 6, 1 June 1996 (1996-06-01), pages 1144-1152, XP000598520 ISSN: 0733-8724 the whole document  A US 6 480 658 B1 (GAUTHERON OLIVIER ET AL) 1-22 12 November 2002 (2002-11-12) column 1, line 52 -column 2, line 27 column 3, line 19 -column 4, line 10 column 5, line 32 -column 7, line 42 figure 1  A KUMAR S ET AL: "Intrachannel nonlinear penalties in dispersion-managed transmission systems" IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS, MAY-JUNE 2002, IEEE, USA, vol. 8, no. 3, pages 626-631, XP002273097 ISSN: 1077-260X cited in the application	Υ	nonlinearities and dispersion-management in highly dispersed transmission" IEICE TRANSACTIONS ON COMMUNICATIONS, APRIL 2003, INST. ELECTRON. INF. & COMMUN. ENG, JAPAN, vol. E86-B, no. 4, pages 1205-1211, XP002273096 ISSN: 0916-8516	<del>-</del>	1-22
12 November 2002 (2002-11-12) column 1, line 52 -column 2, line 27 column 3, line 19 -column 4, line 10 column 5, line 32 -column 7, line 42 figure 1  A KUMAR S ET AL: "Intrachannel nonlinear penalties in dispersion-managed transmission systems" IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS, MAY-JUNE 2002, IEEE, USA, vol. 8, no. 3, pages 626-631, XP002273097 ISSN: 1077-260X cited in the application	<b>Y</b>	WDM OPTICAL-FIBER TRANSMISSION WHEN USING A VARIETY OF FIBER TYPES TO MANAGE DISPERSION AND NONLINEARITIES" JOURNAL OF LIGHTWAVE TECHNOLOGY, IEEE. NEW YORK, US, vol. 14, no. 6, 1 June 1996 (1996-06-01), pages 1144-1152, XP000598520 ISSN: 0733-8724		1-22
penalties in dispersion-managed transmission systems" IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS, MAY-JUNE 2002, IEEE, USA, vol. 8, no. 3, pages 626-631, XP002273097 ISSN: 1077-260X cited in the application	A	12 November 2002 (2002-11-12) column 1, line 52 -column 2, line 27 column 3, line 19 -column 4, line 10 column 5, line 32 -column 7, line 42		1-22
	A	penalties in dispersion-managed transmission systems" IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS, MAY-JUNE 2002, IEEE, USA, vol. 8, no. 3, pages 626-631, XP002273097 ISSN: 1077-260X cited in the application		1-22

## INTERNATIONAL SEARCH REPORT

Information on patent family members

Internation pplication No
PCT/IT 03/00455

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 1263155	Α	04-12-2002	EP WO US	1263155 A1 02098027 A1 2003039436 A1	04-12-2002 05-12-2002 27-02-2003
US 6480658	B1	12-11-2002	WO EP JP	0049742 A1 1074102 A1. 2002537715 A	24-08-2000 07-02-2001 05-11-2002